# SERVICE MANUAL

# FOR

# CONCORD®

**-CA100.2-**
**-CA200.2-**
**-CA30.4-**

Stereo Power Amplifier

**CONCORD SYSTEMS, INC.**
25 Hale Street
Newburyport, MA 01950

PARTS LIST - CA100.2

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| U1 | 26-0175 | IC, DUAL OP AMP, LM833 | 1 |
| U151 | 26-0176 | IC, SW. REG., TL494CN | 1 |
| Q10, 12, 60, 62 | 20-0341 | TRANSISTOR, PWR, TIP36B | 4 |
| Q9, 11, 59, 61 | 20-0316 | TRANSISTOR, PWR, TIP35B | 4 |
| Q8, 58 | 20-0317 | TRANSISTOR, PWR, TIP32C | 2 |
| Q7, 57 | 20-0318 | TRANSISTOR, PWR, TIP31C | 2 |
| Q159, 160, 161, 162, 163, 164, 165, 166 | 20-319 | TRANSISTOR, PWR, SGSP 3055A | 8 |
| Q3, 53, 102 | 20-0320 | TRANSISTOR, SIGNAL, HV, MPSA93 | 3 |
| Q101, 126 | 20-0321 | TRANSISTOR, SIGNAL, HV, MPSA43 | 2 |
| Q15, 65 | 20-0322 | TRANSISTOR, SIGNAL, DAR, MPSA25 | 2 |
| Q6, 56 | 20-0323 | TRANSISTOR, POWR, MJE182 | 2 |
| Q4, 54 | 20-0324 | TRANSISTOR, PWR, MJE172 | 2 |
| Q1, 2, 51, 52 | 20-0325 | TRANSISTOR, SIGNAL, 2N5210 | 4 |
| Q151, 152, 155, 156 | 20-0326 | TRANSISTOR, SIGNAL, 2N4403 | 4 |
| Q5, 55, 153 | 20-0327 | TRANSISTOR, SIGNAL, 2N4401 | 3 |
| ZD153, 154 | 20-0328 | DIODE, ZENER, 47V, 1W, 1N4756 | 2 |
| ZD151, 155, 156 | 20-0329 | DIODE, ZENER, 15V, 1/4W, IN965A | 3 |
| ZD152 | 20-0330 | DIODE, ZENER, 8V, 2W, 1N756B | 1 |
| D158, 159, 160, 161 | 20-0331 | DIODE, PWR, UF, MUR410 | 4 |
| D5, 6, 55, 56 | 20-0332 | DIODE, PWR, FR103 | 4 |
| D1, 2, 3, 51, 52, 53, 101, 102, 126, 127, 151, 157 | 20-0113 | DIODE, SIGNAL, 1N4148 | 17 |



PARTS LIST - CA100.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| C6, 56 | 29-0036 | CAPACITOR, ELECT, 220uF, 10V | 2 |
| C165, 166, 167, 168 | 29-0150 | CAPACITOR, ELECT, 2200uF, 35V | 4 |
| C158, 159, 160, 161 | 29-0164 | CAPACITOR, ELECT, 1000uF, 35V | 4 |
| C5, 13, 15, 55 63, 65 | 29-0165 | CAPACITOR, ELECT, 100uF, 35V | 6 |
| C153, 155 | 29-0004 | CAPACITOR, ELECT, 100uF, 16V | 2 |
| C14, 16, 64, 66 | 29-0166 | CAPACITOR, ELECT, 47uF, 35V | 4 |
| C5, 53 | 29-0020 | CAPACITOR, ELECT, 47uF, 10V | 2 |
| C170, 171 | 29-0135 | CAPACITOR, ELECT, 22uF, 16V | 2 |
| C2, 10, 11, 17, 52, 60, 61, 67, 151, 156, 157, 162, 163, 164, 169 | 29-0156 | CAPACITOR, MYLAR, .1uF, 100V | 15 |
| C12, C62 | 29-0157 | CAPACITOR, MYLAR, 68nF, 100V | 2 |
| C101, 102, 103, 126, 152, 154 | 29-0158 | CAPACITOR, MYLAR, 10nF, 100V | 6 |
| C1, 51 | 29-0160 | CAPACITOR, MYLAR, 1nF, 100V | 2 |
| C7, 8, 57, 58 | 29-0167 | CAPACITOR, NPO/COG MONO, 220pF, 50V | 4 |
| C9, 59 | 29-0163 | CAPACITOR, NPO/COG MONO, 47pF, 50V | 2 |
| C172, 173 | 29-0161 | CAPACITOR, NPO/COG MONO, 330pF, 50V | 2 |
| VR2, 52 | 30-0096 | POT, TRIMMER, PT10V - 5K | 2 |
| VR1, 51 | 30-0097 | POT, CONTROL, DUAL, PC16-50K | 1 |
| R28, 78 | 30-0099 | RESISTOR, MF, 1 OHM, 1W, 5% | 2 |

PARTS LIST - CA100.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| R1, 4, 51, 54, 103, 104, 128, 129, 153, 156, 157, 158, 160, 170, 171, 186 | | RESISTOR, CF, 1K OHM, 1/4W, 5% | 16 |
| R3, 7, 10, 11, 53, 57, 60, 61 | | RESISTOR, CF, 680 OHM, 1/4W, 5% | 8 |
| R12, 62 | | RESISTOR, CF, 470 OHM, 1/4W, 5% | 2 |
| R6, 56 | | RESISTOR, CF, 220 OHM, 1/4W, 5% | 2 |
| R29, 79 | | RESISTOR, CF, 100 OHM, 1/4W, 5% | 2 |
| R13, 14, 63, 64, 174, 175, 176, 177, 178, 179, 180, 181 | | RESISTOR, CF, 47 OHM, 1/4W, 5% | 12 |
| R154 | | RESISTOR, 10 OHM, 1/4W, 5% | 1 |
| TH151 | 26-0178 | THERMISTOR, 80 C, S200-0159 | 1 |
| J1 | 65-0219 | JACK, STEREO, RCA, H700-0165 | 1 |
| FB151 | | FERRITE BEAD, 1400-0155 | 1 |
| FB1, 2, 51, 52 | | FERRITE BEAD, 1400-0150 | 4 |
| SW1 | 18-0146 | SWITCH, BRIDGING, DPDT | 1 |
| L151, 152 | 24-0176 | INDUCTOR, TORROID, 1150-0425 | 2 |
| L1, 51 | 24-0177 | INDUCTOR, AIR CORE, 3.3uH | 2 |
| T151 | 24-0180 | TRANSFORMER, POWER, A500-0100 | 1 |
| HJ1, 2, 51, 52 | | HEAT SINK, H700-0350 | 4 |
| L2, 3, 52, 53 | 24-0178 | INDUCTOR, AXIAL, 470uH | 4 |
| W196 | WG-CA10 | WIRE, STRANDED, 10 GAUGE, BLK., 12" | 1 |
| W197 | WP-CA10 | WIRE, STRANDED, 10 GAUGE, BLK., 12" | 1 |



PARTS LIST - CA100.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| R21, 22, 23, 24, 71, 72, 73, 74 | 30-0100 | RESISTOR, MF, 0.2 OHM, 1W, 5% | 8 |
| R167, 182 | | RESISTOR, CF, 100 OHM, 1/2W, 5% | 2 |
| R27, 77 | | RESISTOR, CF, 15 OHM, 1/2W, 5% | 2 |
| R183, 184 | | RESISTOR, CF, 1.5K OHM, 1/2W, 5% | 2 |
| R19, 20, 69,70 | | RESISTOR, CF, 1 OHM, 1/2W, 5% | 4 |
| R8, 58 | | RESISTOR, CF, 910 OHM, 1/2W, 5% | 2 |
| R82 | | RESISTOR, CF, 13K OHM, 1/4W, 5% | 1 |
| R9, 59 | | RESISTOR, CF, 20K OHM, 1/4W, 5% | 2 |
| R168 | | RESISTOR, CF, 100K OHM, 1/4W, 5% | 1 |
| R185 | | RESISTOR, CF, 62K OHM, 1/4W, 5% | 1 |
| R16, 17, 31, 66, 67, 81, 164 | | RESISTOR, CF, 47K OHM, 1/4W, 5% | 7 |
| R151 | | RESISTOR, CF, 36K OHM, 1/4W, 5% | 1 |
| R155 | | RESISTOR, CF, 27K OHM, 1/4W, 5% | 1 |
| R152 | | RESISTOR, CF, 24K OHM, 1/4W. 5% | 1 |
| R5, 30, 32, 55, 80, 105, 106, 107, 130, 159, 162, 163, 165, 169 | | RESISTOR, CF, 10K OHM, 1/4W, 5% | 14 |
| R101, 102, 126, 127 | | RESISTOR, CF, 8.2K OHM, 1/4W, 5% | 4 |
| R166 | | RESISTOR, CF, 2.2K OHM, 1/4W, 5% | 1 |

PARTS LIST - CA200.2

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| U1 | 26-0175 | IC, DUAL OP AMP, LM833 | 1 |
| U151 | 26-0176 | IC, SW. REG, TL494CN | 1 |
| Q10, 12, 14, 60, 62, 64 | 20-0334 | TRANSISTOR, PWR, TIP36C | 6 |
| Q9, 11, 13, 59, 61, 63 | 20-0335 | TRANSISTOR, PWR, TIP35C | 6 |
| Q8, 58 | 20-0317 | TRANSISTOR, PWR, TIP32C | 2 |
| Q7, 57, 154 | 20-0318 | TRANSISTOR, PWR, TIP31C | 3 |
| Q159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174 | 20-0319 | TRANSISTOR, PWR, SGSP3055A | 16 |
| Q3, 53, 102 | 20-0320 | TRANSISTOR, SIGNAL, HV, MPSA93 | 3 |
| Q101, 126 | 20-0321 | TRANSISTOR, SIGNAL, HV, MPSA43 | 2 |
| Q15, 65 | 20-0322 | TRANSISTOR, SIGNAL, DAR, MPSA25 | 2 |
| Q6, 56 | 20-0336 | TRANSISTOR, PWR, MJE340 | 2 |
| Q4, 54 | 20-0337 | TRANSISTOR, PWR, MJE350 | 2 |
| Q1, 2, 51, 52 | 20-0325 | TRANSISTOR, SIGNAL, 2N5210 | 4 |
| Q151, 152, 155, 156 | 20-0326 | TRANSISTOR, SIGNAL, 2N4403 | 4 |
| Q5, 55, 153 | 20-0327 | TRANSISTOR, SIGNAL, 2N4401 | 3 |
| ZD153, 154 | 20-0338 | DIODE, ZENER, 39V, 1N975A | 2 |
| ZD151 | 20-0329 | DIODE, ZENER, 15V, 1N965A | 1 |
| ZD152 | 20-0339 | DIODE, ZENER, 10V, 1N758B | 1 |
| D158, 159, 160, 161 | 20-0340 | DIODE, PWR, UF, MUR415 | 4 |



PARTS LIST - CA100.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| DS151 | 65-0224 | LED, RED, 1/8" DIA | 1 |
| SJ1 | 65-0225 | SPEAKER JACK, 4p | 1 |
| GR1 | 65-0223 | GROMMET, STRAIN RELIEF | 1 |
| BB1 | 65-0222 | BUTTON, BRIDGING SWITCH | 1 |

PARTS LIST - CA200.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| D5, 6, 55, 56 | 20-0332 | DIODE, PWR, FR103 | 4 |
| D1, 2, 3, 51, 52, 53, 101, 102 126, 127, 151, 152, 153, 154, 155, 156, 157, 162, 163 | 20-0113 | DIODE, SIGNAL, 1N4148 | 19 |
| C158, 159, 160, 161, 165, 166, 167, 168 | 29-0153 | CAPACITOR, ELECT, 2200uF, 50V | 8 |
| C6, C56 | 29-0036 | CAPACITOR, ELECT, 220uF, 10V | 2 |
| C5, 13, 15, 55, 63, 65 | 29-0154 | CAPACITOR, ELECT, 100uF, 50V | 6 |
| C153, 155 | 29-0004 | CAPACITOR, ELECT, 100 uF, 16V | 2 |
| C14, 16, 64, 66 | 29-0156 | CAPACITOR, ELECT, 47uF, 50V | 4 |
| C3, 52 | 29-0020 | CAPACITOR, ELECT, 47uF, 10V | 2 |
| C170, 171 | 29-0135 | CAPACITOR, ELECT, 22uF, 16V | 2 |
| C2, 10, 11, 17, 53, 60, 61, 67, 151, 156, 157, 162, 163, 164, 169 | 29-0170 | CAPACITOR, MYLAR, 1uF, 100V | 15 |
| C12, C62 | 29-0157 | CAPACITOR, MYLAR, 68nF, 100V | 2 |
| C101, 102, 126, 152, 174 | 29-0158 | CAPACITOR, MYLAR, 10nF, 100V | 5 |
| C154 | 29-0159 | CAPACITOR, MYLAR, 6.8nF, 100V | 1 |
| C1, 51 | 29-0160 | CAPACITOR, MYLAR, 1nF, 100V | 1 |
| C172, 173 | 29-0161 | CAPACITOR, NPO/COG, MONO, 330pF, 50V | 2 |



PARTS LIST - CA200.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| C7, 8, 57, 58 | 29-0162 | CAPACITOR, NPO/COG, MONO, 220pF, 100V | 4 |
| C9, 59 | 29-0163 | CAPACITOR, NPO/COG, MONO, 47/50pF, 50V | 2 |
| VR2, 52 | 30-0101 | POT, TRIMMER, PT10V-5K | 2 |
| VR1, 51 | 30-0097 | POT, CONTROL, DUAL, PC16-50K | 2 |
| R27, 77 | 30-0098 | RESISTOR, MF, 15 OHM, 1W, 5% | 2 |
| R28, 78 | 30-0099 | RESISTOR, MF, 1 OHM, 1W, 5% | 2 |
| R21, 22, 23, 24, 25, 26, 71, 72, 73, 74, 75, 76 | 30-0100 | RESISTOR, MF, 0.2 OHM, 1W, 5% | 12 |
| R191, 192 | | RESISTOR, CF, 3.3K OHM, 1/2W, 5% | 2 |
| R167, 190 | | RESISTOR, CF, 100 OHM, 1/2W, 5% | 2 |
| R19, 20, 69, 70 | | RESISTOR, CF, 1 OHM, 1/2W, 5% | 4 |
| R168 | | RESISTOR, CF, 100K OHM, 1/4W, 5% | 1 |
| R193 | | RESISTOR, CF, 62K OHM, 1/4W, 5% | 1 |
| R16, 17, 31, 66, 67, 81, 151, 164 | | RESISTOR, CF, 47K OHM, 1/4W, 5% | 8 |
| R152 | | RESISTOR, CF, 33K OHM, 1/4W, 5% | 1 |
| R155 | | RESISTOR, CF, 27K OHM, 1/4W, 5% | 1 |
| R9, 59 | | RESISTOR, CF, 20K OHM, 1/4W, 5% | 2 |
| R5, 55, 82, 101, 102, 126, 127 | | RESISTOR, CF, 13K OHM, 1/4W, 5% | 7 |
| R30, 32, 80, 105, 106, 107, 130, 159, 162, 163, 165, 169 | | RESISTOR, CF, 10K OHM, 1/4W, 5% | 12 |

PARTS LIST - CA200.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| L1, 51 | 24-0177 | INDUCTOR, AIR CORE, 3.3uH | 2 |
| L2, 3, 52, 53 | 24-0178 | INDUCTOR, AXIAL, 470uH | 4 |
| T151 | 24-0179 | TRANSFORMER, PWR, A500-0200 | 1 |
| HS3, 4, 53, 54 | | HEAT SINK, H700-0355 | 4 |
| HS1, 2, 51, 52 | | HEAT SINK, H700-0350 | 4 |
| BP1, 51 | 65-0220 | BINDING POST, OUTPUT | 2 |
| BS1 | 65-0221 | BARRIER STRIP | 1 |
| BB1 | 65-0222 | BUTTON, BRIDGING SWITCH | 1 |
| DS151 | 65-0224 | LED, RED, 1/8" | 1 |



PARTS LIST - CA200.2 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| R195 | | RESISTOR, CF, 3.3K OHM, 1/4W, 5% | 1 |
| R166 | | RESISTOR, CF, 2.2K OHM, 1/4W, 5% | 1 |
| R1, 4, 12, 51, 54, 62, 103, 104, 128,-129, 153, 156, 157, 158, 160, 170, 171, 194 | | RESISTOR, CF, 1K OHM, 1/4W, 5% | 18 |
| R8, 58 | | RESISTOR, CF, 910 OHM, 1/4W, 5% | 2 |
| R3, 7, 10, 11, 53 57, 60, 61 | | RESISTOR, CF, 680 OHM, 1/4W, 5% | 8 |
| R6, 56 | | RESISTOR, CF, 220 OHM, 1/4W, 5% | 2 |
| R29, 79 | | RESISTOR, CF, 120 OHM, 1/4W, 5% | 2 |
| R13, 14, 63, 64, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189 | | RESISTOR, CF, 47 OHM, 1/4W, 5% | 20 |
| R154 | | RESISTOR, CF, 10 OHM, 1/4W, 5% | 1 |
| FA151 | 65-0218 | FAN | 1 |
| TH152 | 26-0177 | THERMISTOR 40 C | 1 |
| TH151 | 26-0178 | THERMISTOR 80 C | 1 |
| J1, 51 | 65-0219 | JACK, STEREO, RCA, H700-0165 | 1 |
| FB151 | | FERRITE BEAD, 1400-0155 | 1 |
| FB1, 2, 51, 52 | | FERRITE BEAD, 1400-0150 | 4 |
| SW1 | 18-0146 | SWITCH, BRIDGING, DPDT | 1 |
| L151, 152 | 24-0176 | INDUCTOR, TORROID, I150-0425 | 2 |

PARTS LIST - CA30.4

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| U1, 51 | 26-0181 | I.C., OUTPUT CONTROL, TDA, 7250 | 2 |
| U101 | 26-0176 | I.C., SW REG, TL494CN | 1 |
| U2 | 26-0182 | I.C., PRE-AMP, LF347N | 1 |
| Q1, 3, 51, 53 | 20-0342 | TRANSISTOR, PWR, TIP141 | 4 |
| Q2, 4, 52, 54 | 20-0343 | TRANSISTOR, PWR, TIP146/147 | 4 |
| Q107, 108 | 20-0326 | TRANSISTOR, SIGNAL, 2N4403 | 2 |
| Q101, 102, 103, 103A, 104, 105, 106, 106A | 20-0319 | TRANSISTOR, PWR, SEFP3055A | 8 |
| VR101 | 20-0329 | DIODE, ZENER, 15V, 1/4W, IN965B | 1 |
| VR102 | 20-0344 | DIODE, ZENER, 9V, 1W, IN757A | 1 |
| VR103, 104 | 20-0338 | DIODE, ZENER, 39V, 1/4W, IN975B | 2 |
| CR101, 103, 104, 105, 106 | 20-0113 | DIODE, SIGNAL, IN4148 | 5 |
| CR102 | 20-0332 | DIODE, PWR, FR103 | 1 |
| CR107, 108, 109 110 | 20-0345 | DIODE, PWR, RECTIFIER, VHE620 | 4 |
| C114, 115 | 29-0150 | CAPACITOR, ELECT, 2200uF, 35V | 2 |
| C109, 110, 111, 112 | 29-0164 | CAPACITOR, ELECT, 1000uF, 35V | 4 |
| C7, 29, 30, 57, 64, 79, 80, 104 105, 14 | 29-0036 | CAPACITOR, ELECT, 220uF, 10V | 10 |
| C117 | 29-0156 | CAPACITOR, MYLAR, 0.1uF, 100V | 1 |
| C16, 22, 28, 66 | 29-0135 | CAPACITOR, ELECT, 22uF, 16V | 4 |



PARTS LIST - CA30.4 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| C18, 21, 68, 71, 101, 103, 113, 116 | 29-0156 | CAPACITOR, MYLAR, 0.1uF, 100V | 8 |
| C102, 106 | 29-0158 | CAPACITOR, MYLAR, 10nF, 100V | 2 |
| C1, 2, 9, 10, 17, 20, 35, 36, 51, 52, 59, 60, 67, 70, 85, 86 | 29-0160 | CAPACITOR, MYLAR, 1nF, 100V | 16 |
| C19, 69 | 29-0083 | CAPACITOR, ELECT, 2.2uF, 50V | 2 |
| C3, 4, 11, 27, 53, 54, 61, 77 | 29-0018 | CAPACITOR, ELECT, 4.7uF, 35V | 8 |
| C26, 23, 76, 73 | 29-0166 | CAPACITOR, ELECT, 47uF, 35V | 4 |
| C37, 38, 87, 88, 107, 108 | 29-0161 | CAPACITOR, NPO/COG, MONO, 330pF, 50V | 6 |
| C5, 6, 12, 13, 55, 56, 62, 63 | 29-0180 | CAPACITOR, NPO/COG, MONO, 180pF, 50V | 8 |
| C39, 40, 89, 90 | 29-0181 | CAPACITOR, NPO/COG, MONO, 33pF, 50V | 4 |
| C33, 34, 83, 84 | 29-0183 | CAPACITOR, NPO/COG, MONO, 22pF, 50V | 4 |
| VR40, 90 | 30-0097 | POT, CONTROL, DUAL, 50K OHM | 2 |
| R120, 121, 122, 123 | | RESISTOR, CF, 910 OHM, 1/4W, 5% | 4 |
| R24, 26, 74, 76, 111, 112, 119 | | RESISTOR, CF, 1K OHM, 1/4W, 5% | 7 |
| R25, 27, 28, 31, 34, 39, 75, 77, 78, 81, 84, 89, 101, 102, 103, 106 | | RESISTOR, CF, 10K OHM, 1/4W, 5% | 16 |

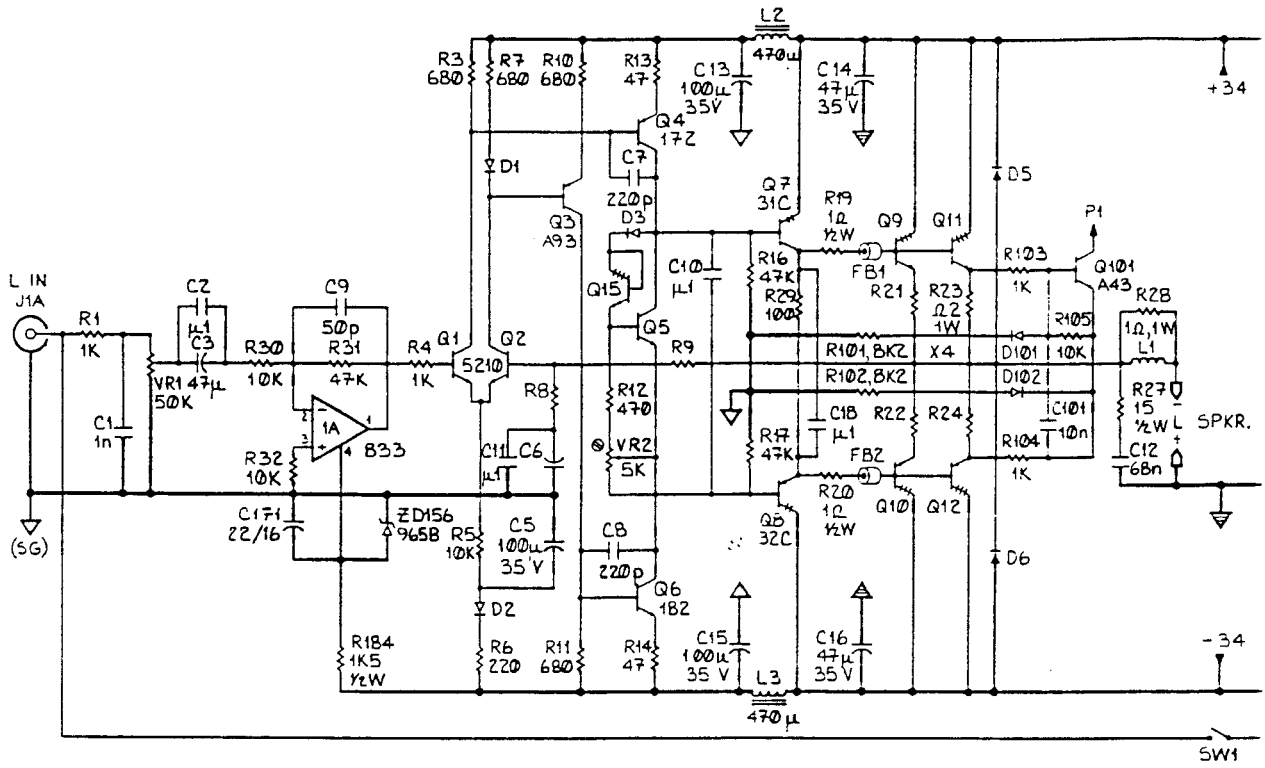
PARTS LIST - CA30.4

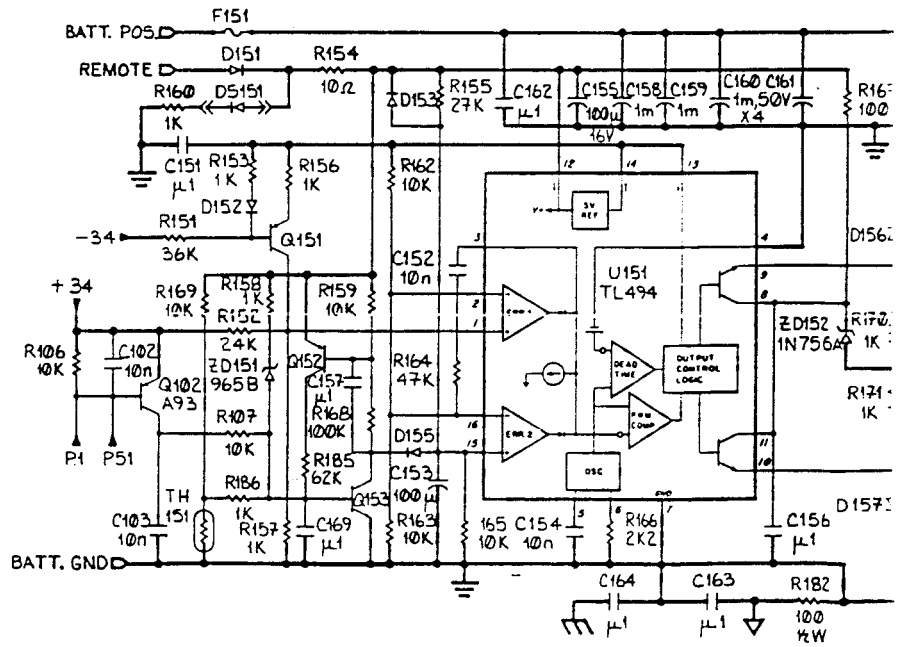
| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| R32, 33, 37, 38 | | RESISTOR, CF, 470 OHM, 1/4W, 5% | 4 |
| R29, 79 | | RESISTOR, CF, 24K OHM, 1/4W, 5% | 2 |
| R30, 80 | | RESISTOR, CF, 33K OHM, 1/4W, 5% | 2 |
| R21, 71 | | RESISTOR, CF, 22K OHM, 1/4W, 5% | 2 |
| R40, 41, 90, 91 | | RESISTOR, CF, 560 OHM, 1/4W, 5% | 4 |
| R23, 35, 73, 85, 108 | | RESISTOR, CF, 100K OHM, 1/4W, 5% | 5 |
| R109 | | RESISTOR, CF, 100 OHM, 1/4W, 5% | 1 |
| R1, 4, 12, 15, 51, 62, 54, 65, 105 | | RESISTOR, CF, 10 OHM, 1/4W, 5% | 9 |
| R2, 3, 13, 14, 53, 63, 64 | | RESISTOR, CF, 270 OHM, 1/4W, 5% | 7 |
| R5, 6, 16, 17, 56, 66, 67, 55 | 30-0100 | RESISTOR, MF, 0.1 OHM, 2W, 1% | 8 |
| R7, 18, 57, 68 | | RESISTOR, CF, 47K OHM, 1/4W, 5% | 4 |
| R8, 19, 58, 69 | | RESISTOR, CF, 1.5K OHM, 1/4W, 5% | 4 |
| R10, 36, 60, 86 | 30-0099 | RESISTOR, MF, 1 OHM, 1W, 5% | 4 |
| R104 | | RESISTOR, CF, 27K OHM, 1/4W, 5% | 1 |
| R107 | | RESISTOR, CF, 750 OHM, 1/4W, 5% | 1 |
| R110 | | RESISTOR, CF, 2.2K OHM, 1/4W, 5% | 1 |
| R113, 113A, 114, 114A, 115, 116, 117, 118 | | RESISTOR, CF, 47 OHM, 1/4W, 5% | 8 |
| RT101 | 26-0183 | HEAT POSISTOR, 65'C | 1 |
| J1, 51 | 65-0219 | JACK, STEREO, RCA, H700-0165 | 2 |



PARTS LIST - CA30.4 (CONTINUED)

| Reference No. | Part No. | Description | Qty. |
|---|---|---|---|
| FB1 | | FERRITE BEAD, 1400-0155 | 1 |
| SW1, 51 | 18-0146 | SWITCH, BRIDGING, DPDT | 2 |
| L1, 2, 51, 52 | 24-0177 | INDUCTOR, AIR CORE, 3.3uH | 4 |
| L101, 102 | 24-0176 | INDUCTOR, TORROID, 30uH | 2 |
| DS101 | 65-0224 | LED, RED, 1/8" | 1 |
| T1 | 24-0181 | TRANSFORMER, POWER | 1 |
| SJ1, 2 | 65-0225 | SPEAKER JACK, 4P | 2 |
| GR1 | 65-0223 | GROMMET, STRAIN RELIEF | 1 |
| BB1 | 65-0222 | BUTTON, BRIDGING SWITCH | 2 |




4 = 2N 4401, TIP 35B, MPS A25; 2N 4403, TIP 36B, SEFP 3055A

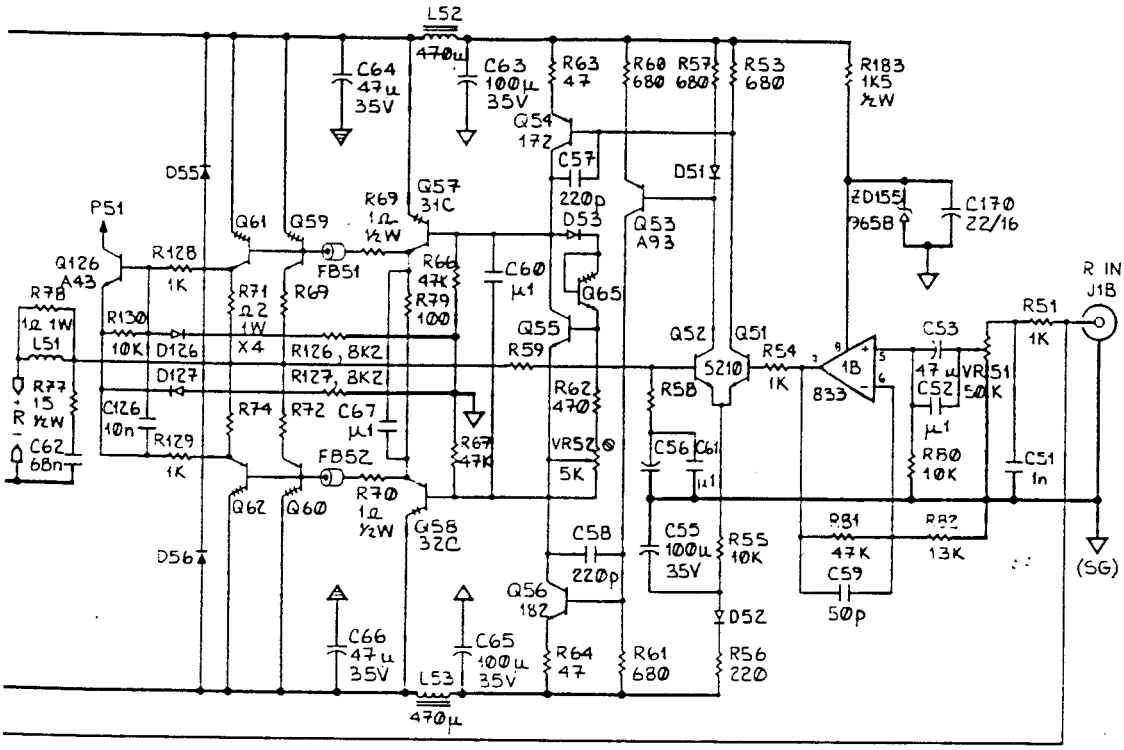
3 = CHASSIS GND; BATT. GND.; SIGNAL GND.; DIRT & SPKR.GND.

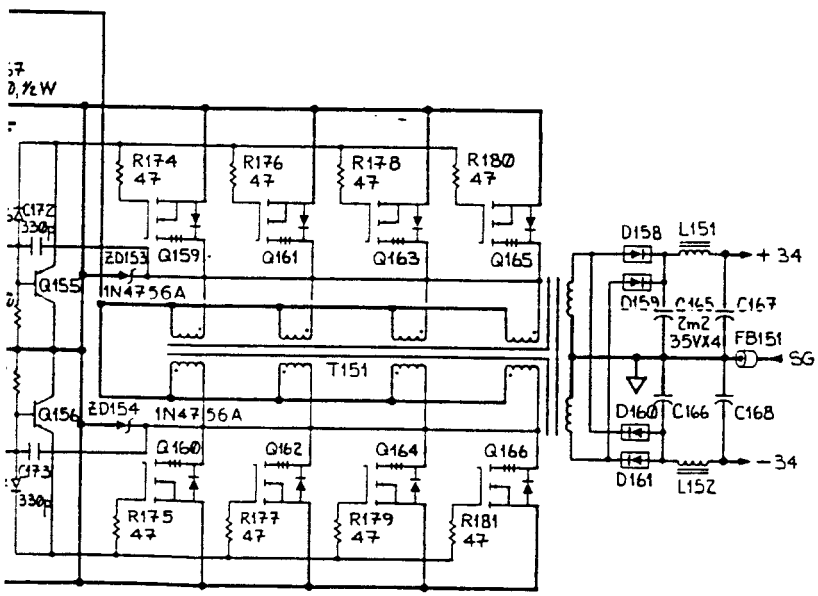
= MUR410/VHE620; = FR103; = IN4148

2 a. ALL RESISTANCE VALUES IN OHMS
b. ALL CAPACITANCE VALUES IN FARADS
c. ALL VALUES:
1. MULTIPLIER AT DECIMAL LOCATION, ie. 3.6K=3K6, .02μ=μ02
2. p=$10^{-12}$, n=$10^{-9}$, μ=$10^{-6}$, m=$10^{-3}$, K=$10^{3}$, M=$10^{6}$

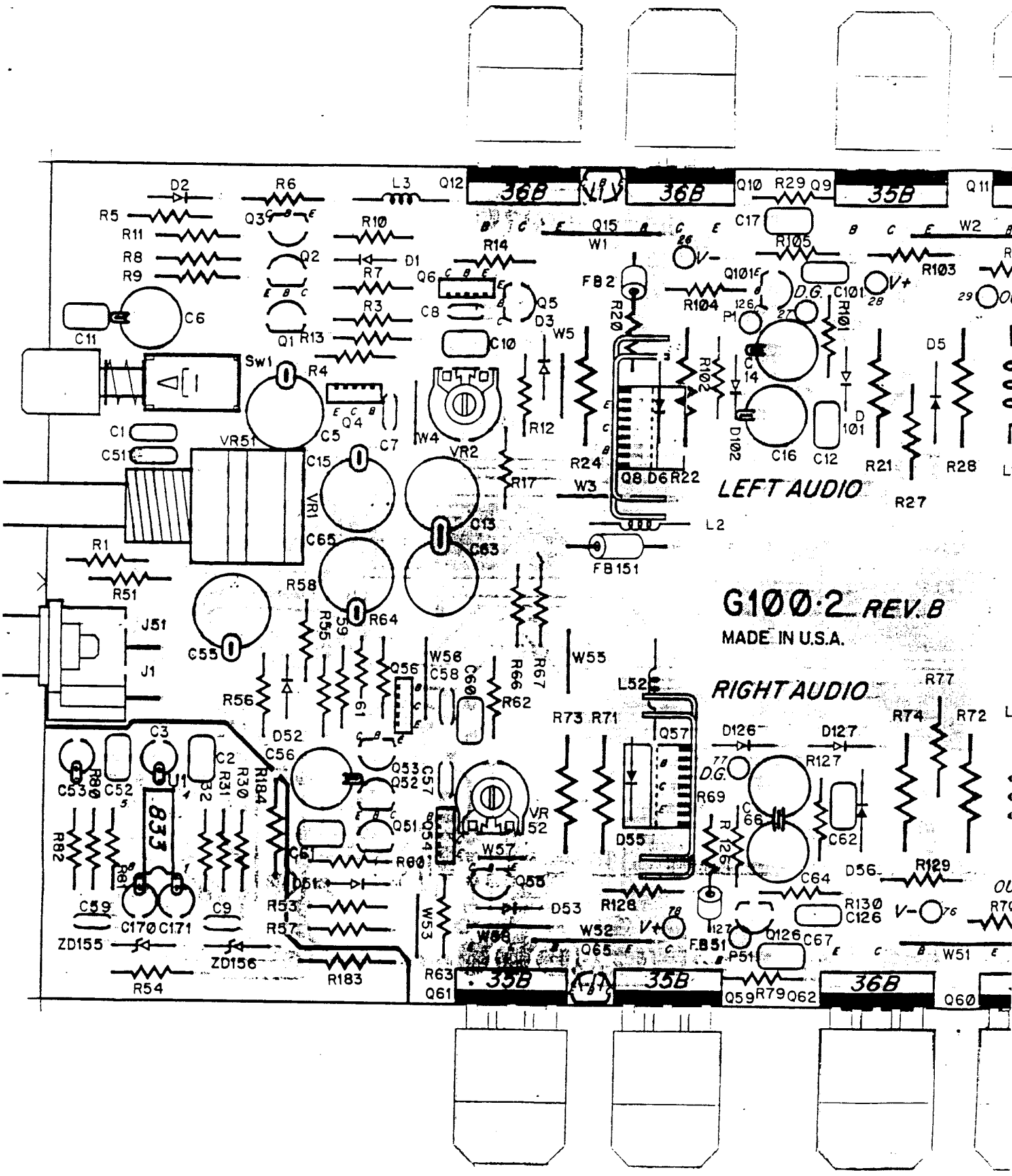
1 EQUIVALENT PARTS MAY BE USED.

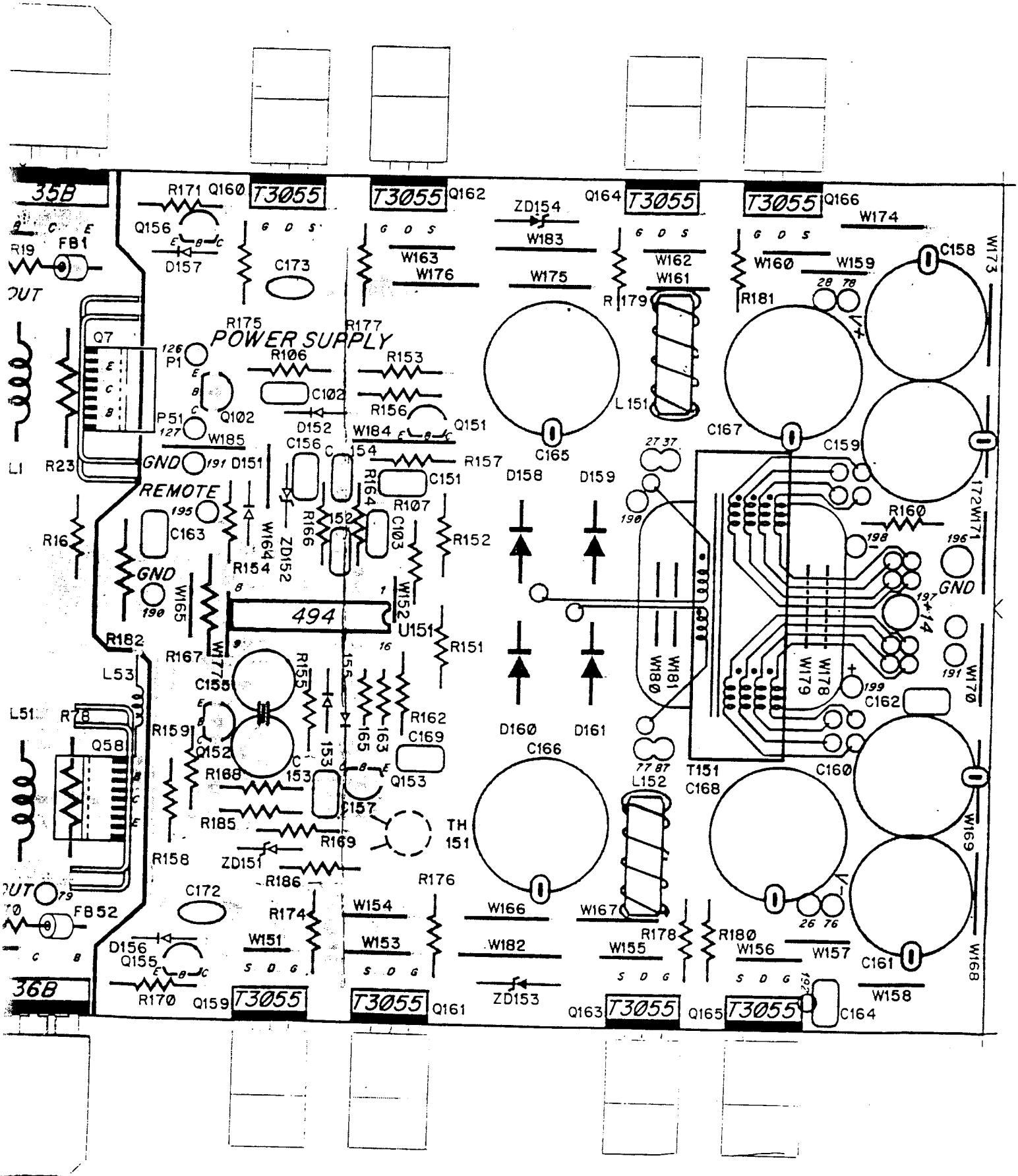
NOTES: UNLESS OTHERWISE SPECIFIED:



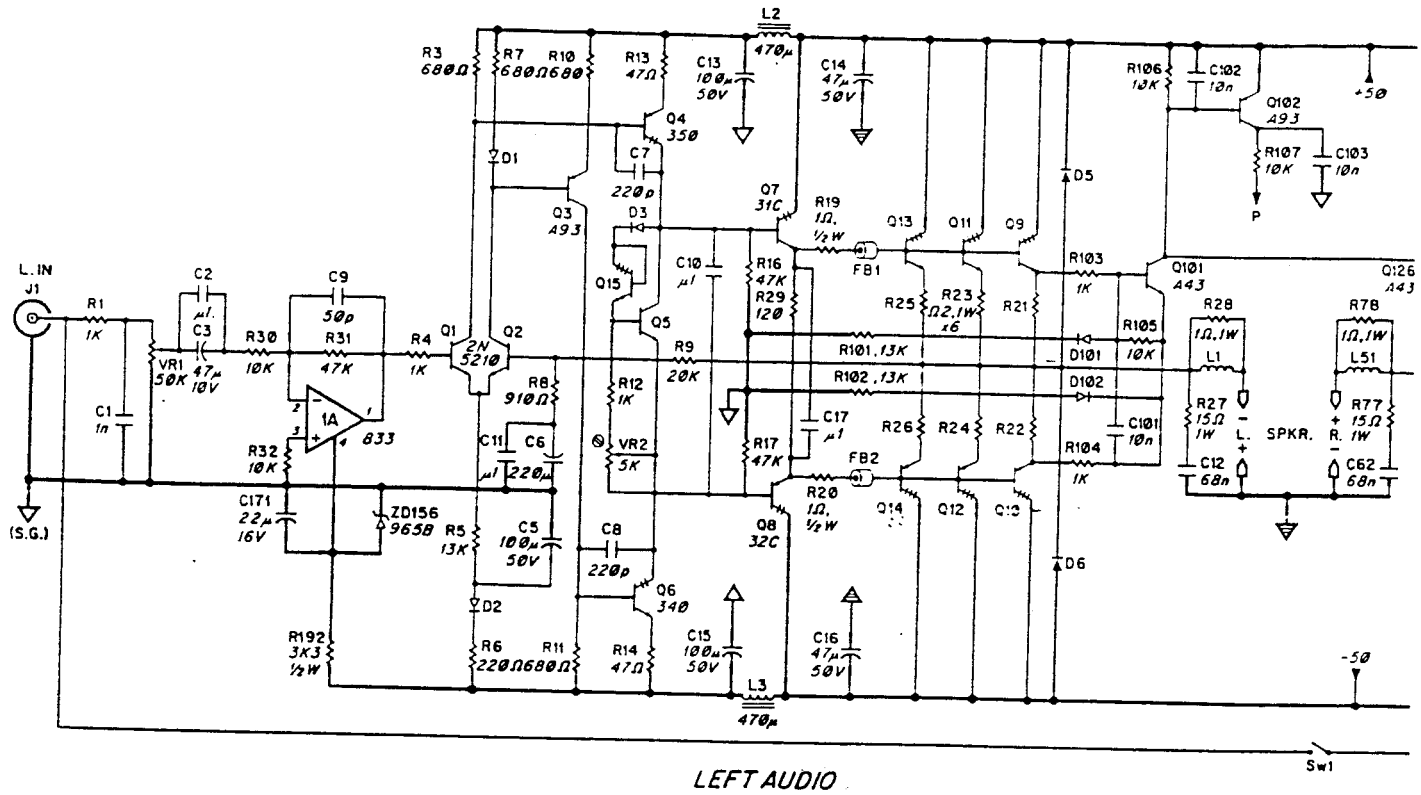




SCHEMATIC DIAG.
CA 100.2

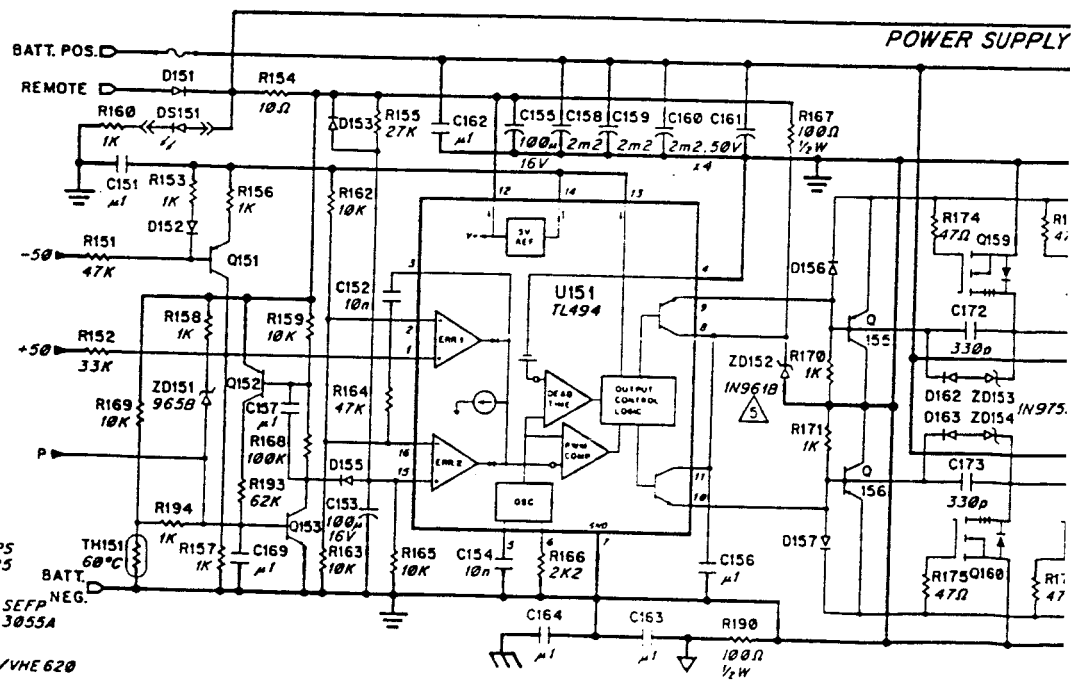

G100·2 REV.B
MADE IN U.S.A.
LEFT AUDIO
RIGHT AUDIO
36B
35B
833




PC BOARD LAYOUT
CA 100.2




LEFT AUDIO

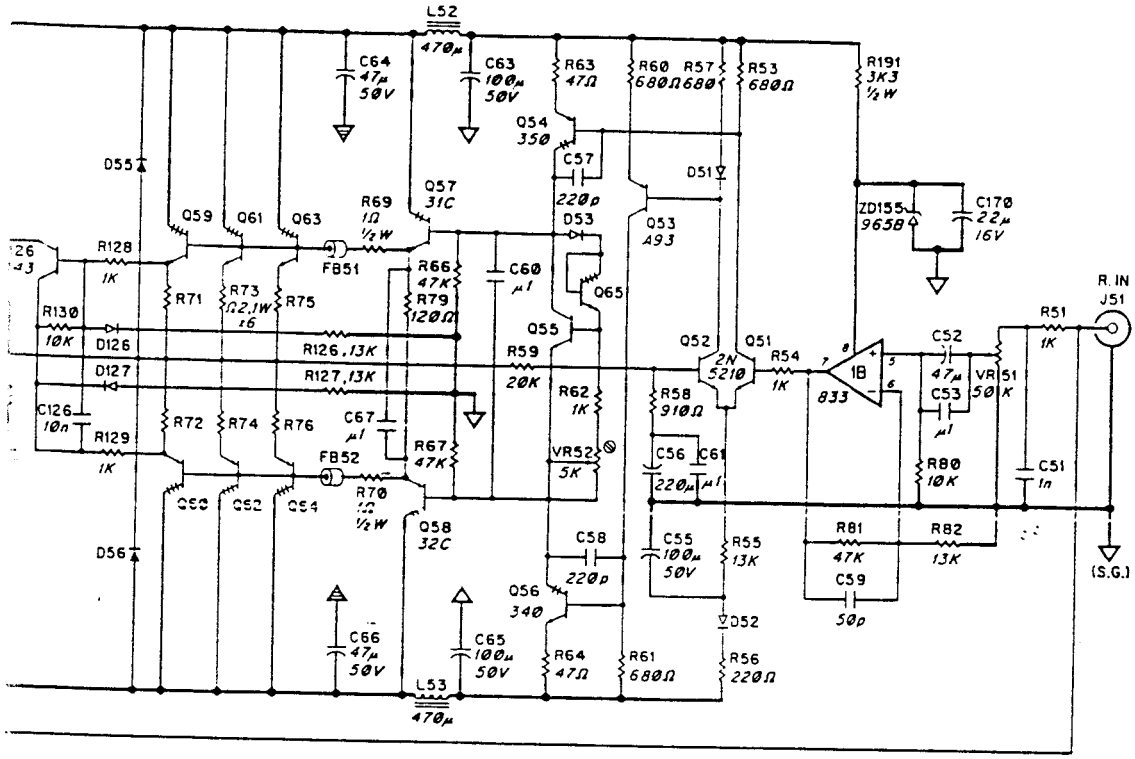



2 a. ALL RESISTANCE VALUES IN OHMS
b ALL CAPACITANCE VALUES IN FARADS
c ALL VALUES:
1 MULTIPLIER AT DECIMAL LOCATION, ie 3.6K=3K6, Ø2µ=µØ2
2 p=10⁻¹², n=10⁻⁹, µ=10⁻⁶, m=10⁻³, K=10³, M=10⁶

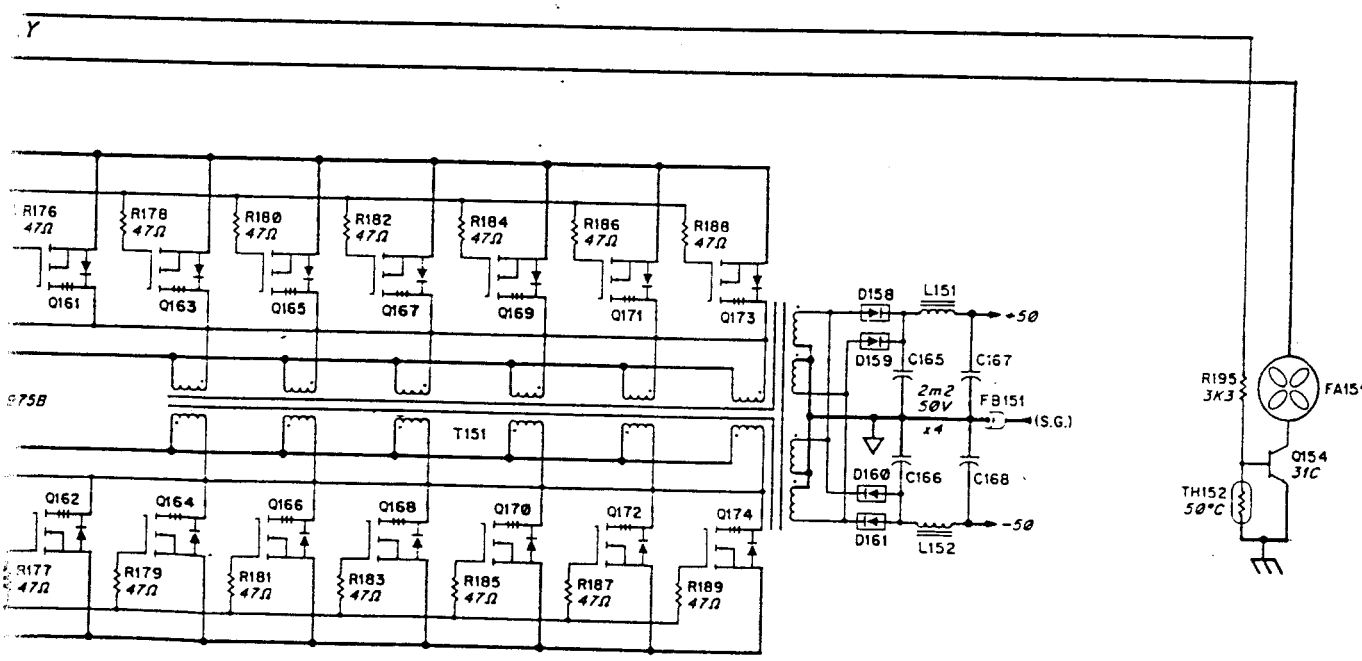
1 EQUIVALENT PARTS MAY BE USED.

NOTES: UNLESS OTHERWISE SPECIFIED

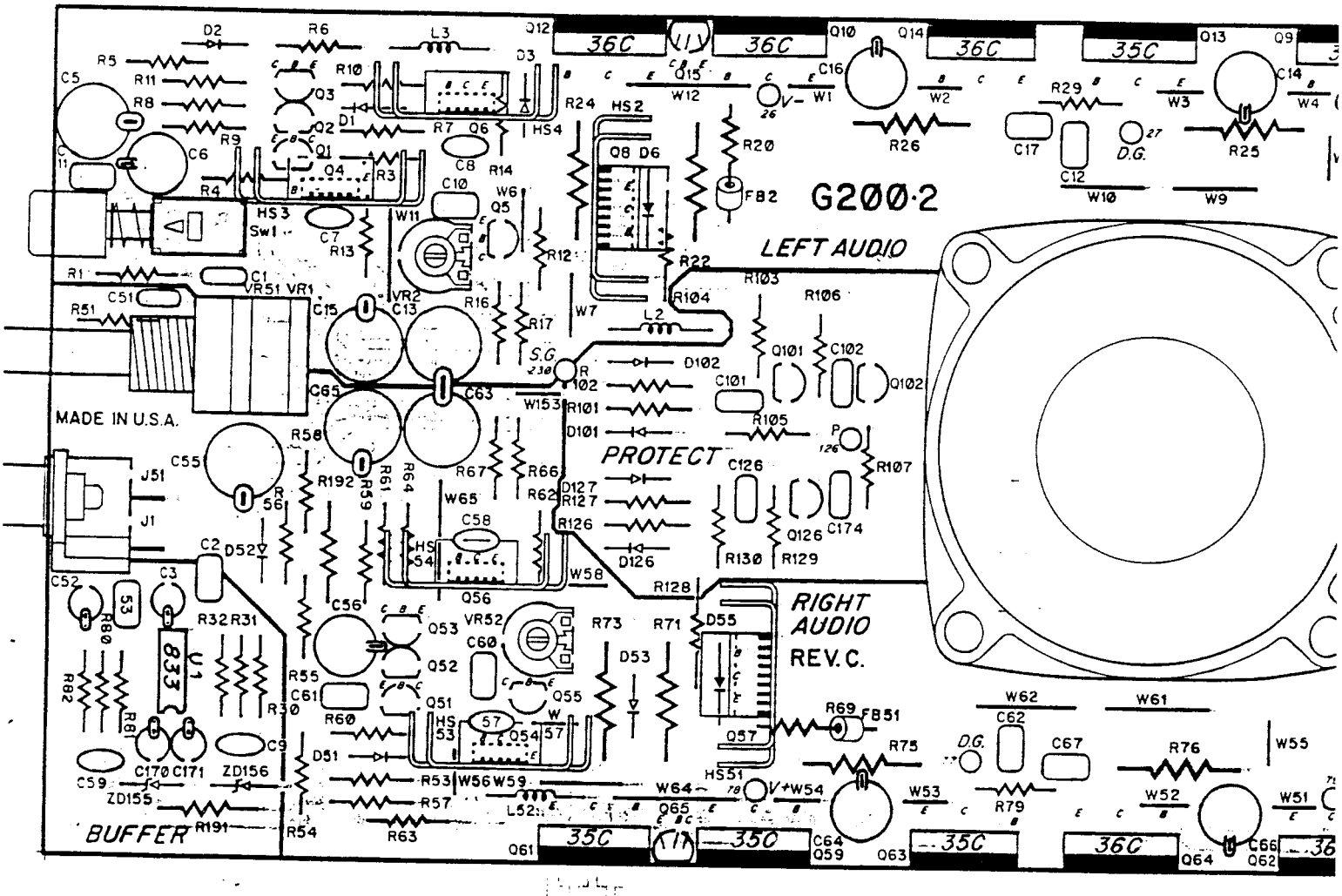
5. OPTIONAL ($V_{GSTH}$ DEPENDENT)

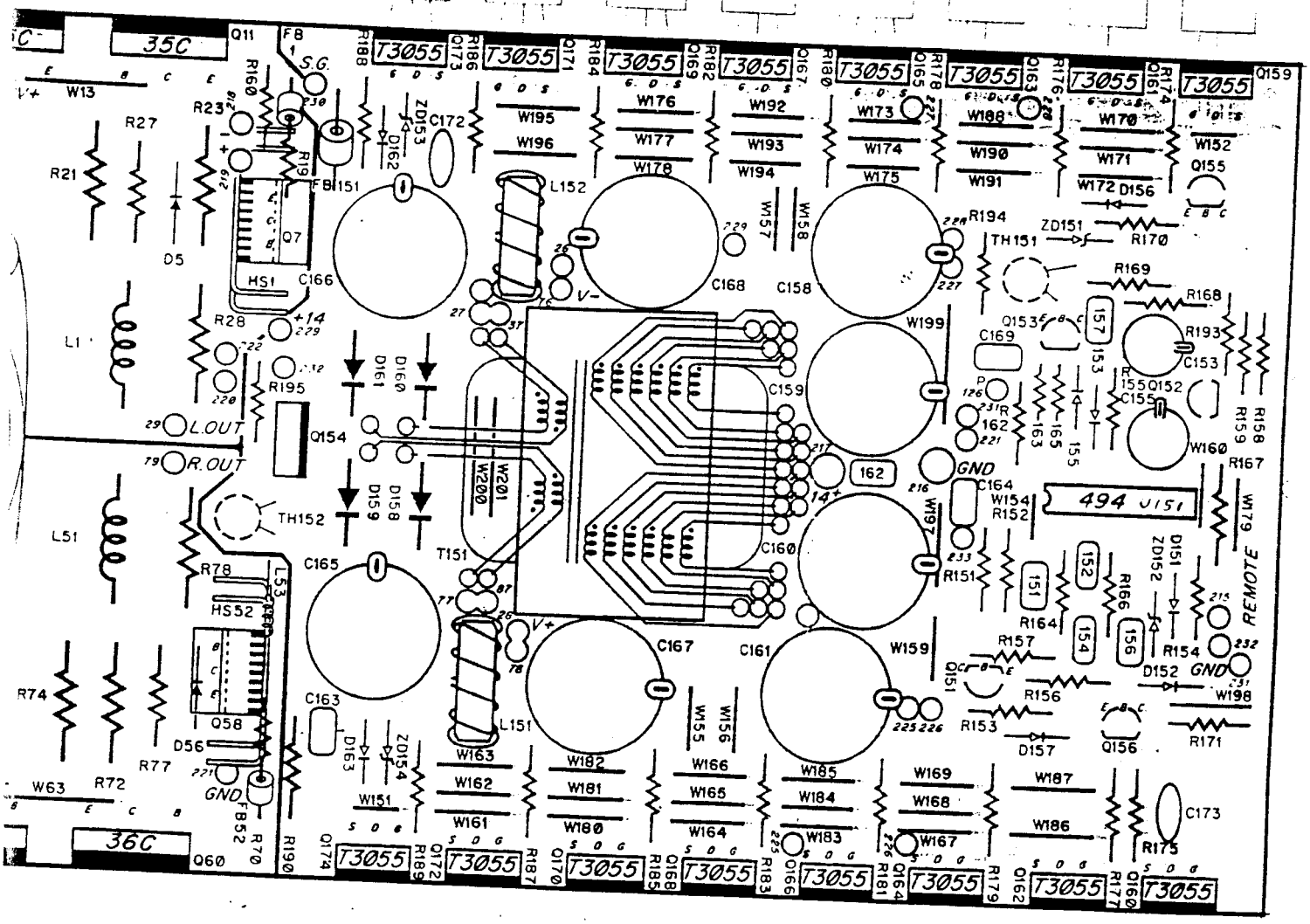



RIGHT AUDIO

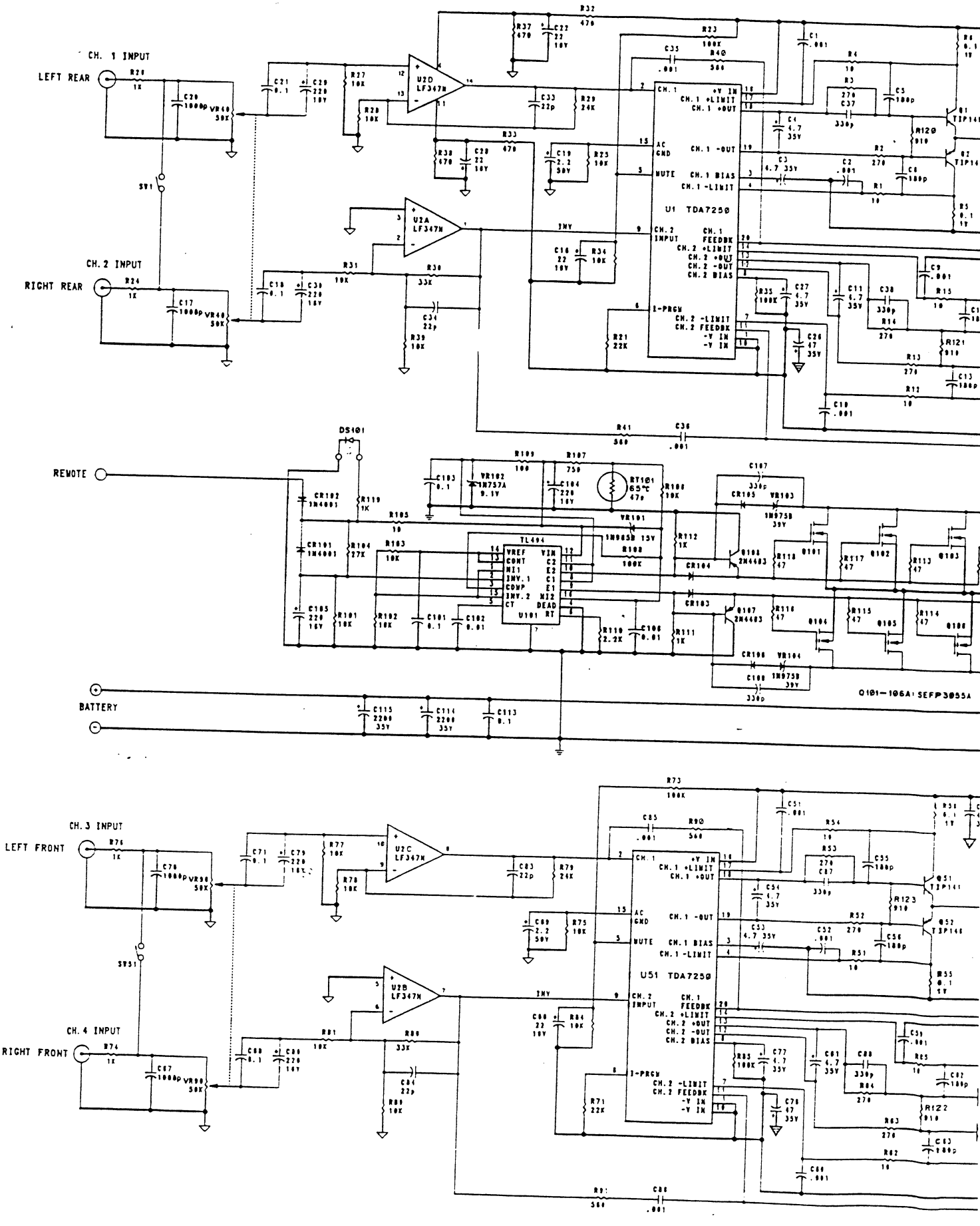


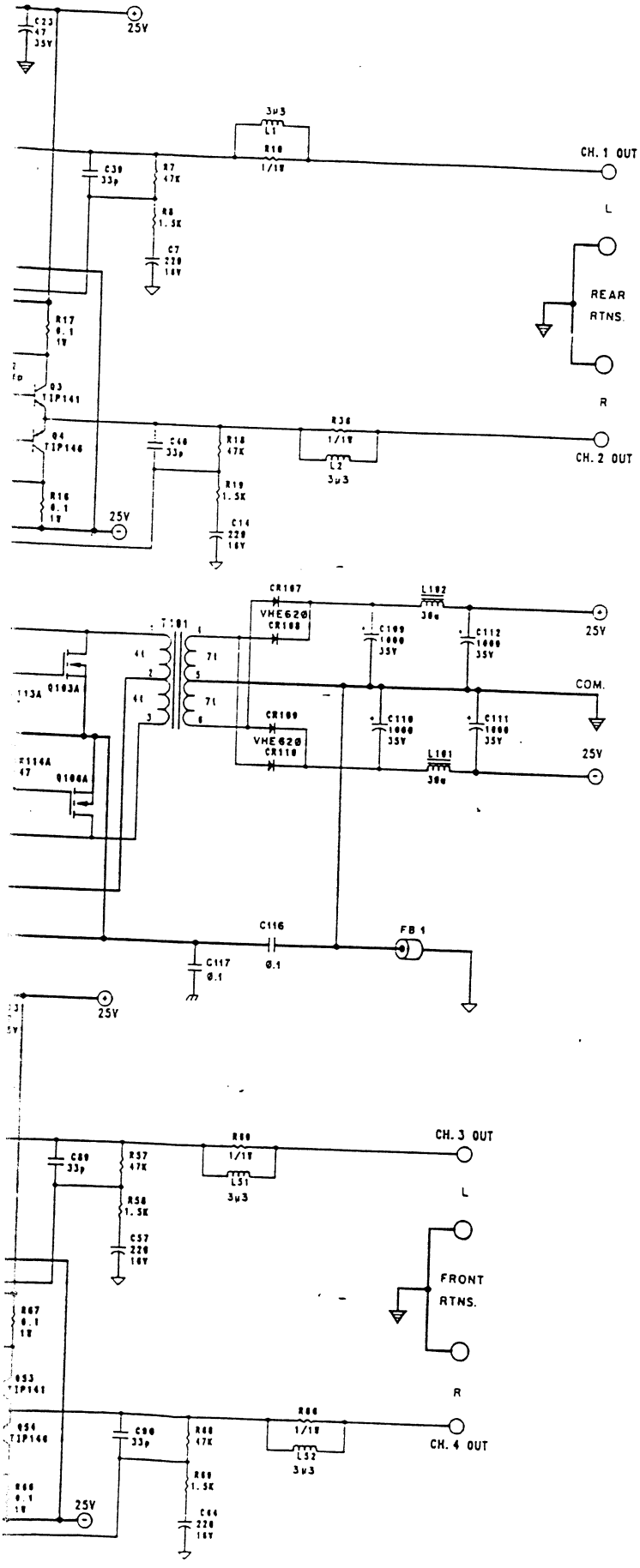

**SCHEMATIC DIAG.**
**CA 200.2**


G200·2
LEFT AUDIO
RIGHT AUDIO
REV.C.
PROTECT
BUFFER
MADE IN U.S.A.
S.G
D.G.
36C
35C
35C
35C
36C
35C
36C
35C
36C

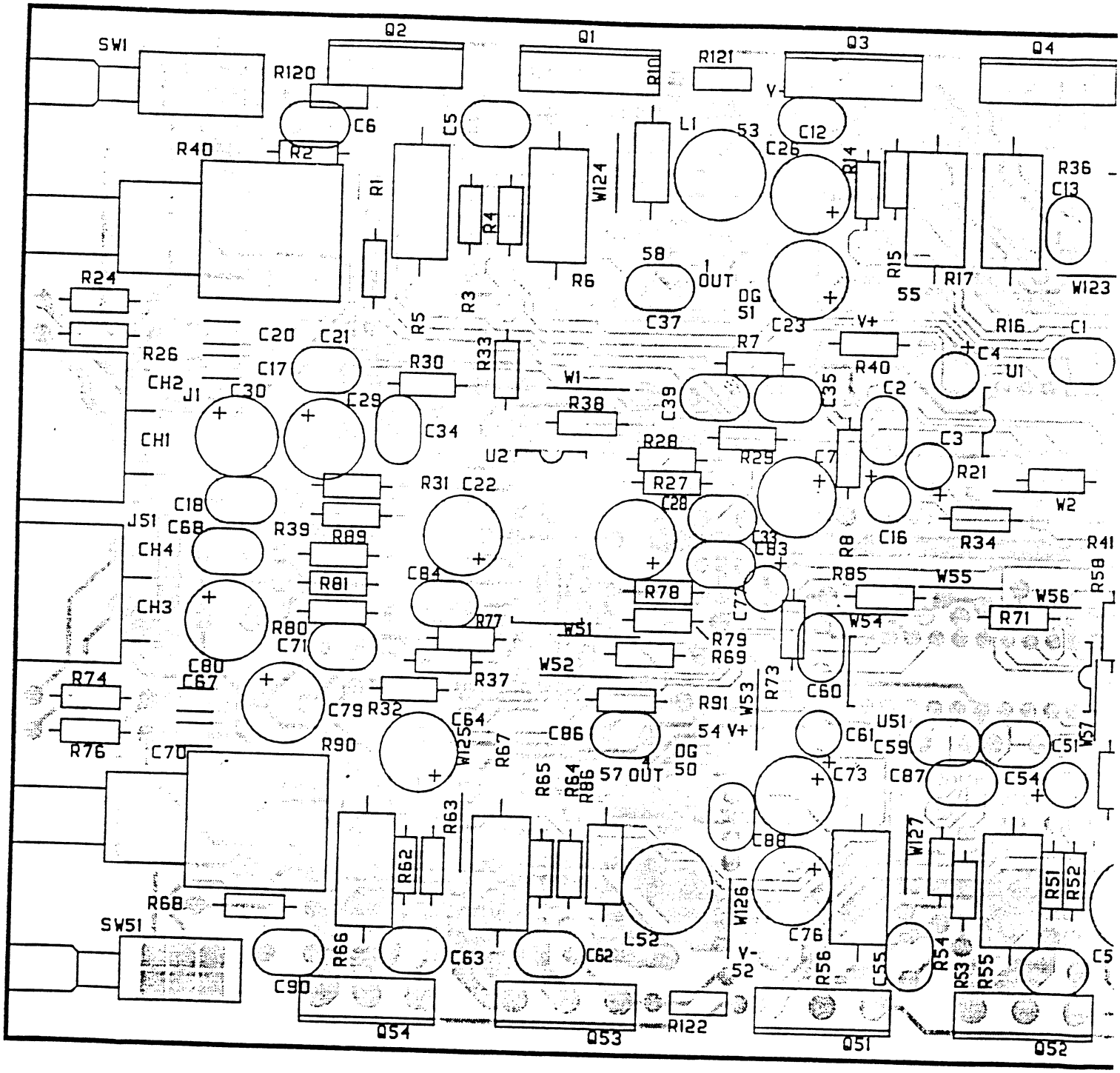



PC BOARD LAYOUT
CA 200.2

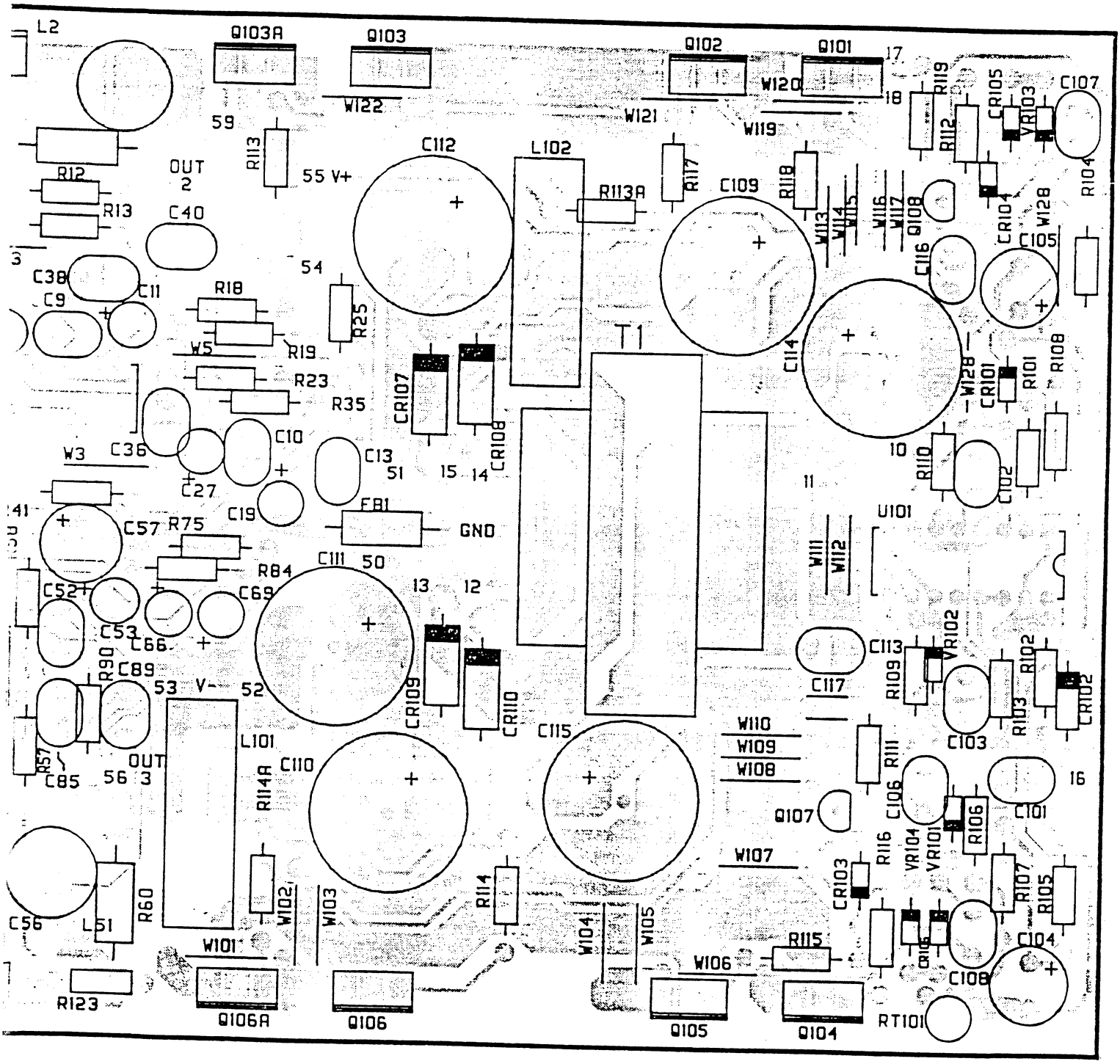

CH. 1 INPUT
LEFT REAR
CH. 2 INPUT
RIGHT REAR
REMOTE
BATTERY
U1 TDA7250
TL494
Q101—106A: SEFP3055A
CH. 3 INPUT
LEFT FRONT
CH. 4 INPUT
RIGHT FRONT
U51 TDA7250




SCHEMATIC DIAG.
CA 30.4




3. a. ALL RESISTANCE VALUES IN OHMS
   b. ALL CAPACITANCE VALUES IN FARADS
   c. ALL VALUES:
      1. MULTIPLIER AT DECIMAL LOCATION, i.e. 3.6K=3K6, .02μ=μ02
      2. $p=10^{-12}$, $n=10^{-9}$, $\mu=10^{-6}$, $m=10^{-3}$, $K=10^{3}$, $M=10^{6}$
2. EQUIVALENT PARTS MAY BE USED.
1. SOLDER PER MIL-STD-454 REQUIREMENT 5




PC BOARD LAYOUT
CA 30.4